

## **WHAT IS CLAIMED IS:**

1. A swimming pool, comprising:
  - a cover configured to cover the swimming pool;
  - a reel carrying said cover; and
  - a pool cover box assembly for containing said cover, comprising:
    - a plurality of walls defining the sides of said pool cover box assembly;
    - a bottom, at least one of said bottom and said plurality of walls having locating features; and
    - at least one equipment mounting assembly located in said pool cover box assembly by contacting said locating features, comprising:
      - at least one positioning feature configured to engage two of said plurality of walls; and
      - at least one mounting plate, said at least one positioning feature adjustably connected to said mounting plate.
2. The swimming pool of claim 1, wherein said mounting plate is configured to engage one of said locating features.
3. The swimming pool of claim 1, wherein at least one said positioning feature includes:
  - at least two sliding members including a first sliding member and a second sliding member, each said sliding member slidably connected to said mounting plate; and

5 at least two connecting members including a first connecting member and a second connecting member, each connecting member having two ends, one end of said first connecting member being pivotally connected to said first sliding member, an other end of said first connecting member being pivotally connected to an end of said second connecting member, an other end of said second connecting member pivotally connected to said second sliding member.

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4. The swimming pool of claim 3, wherein said plurality of walls include a front wall and a rear wall, said first sliding member configured to engage said front wall and said second sliding member configured to engage said rear wall.

5. The swimming pool of claim 3, wherein said at least one positioning feature further comprises:

at least two bolts; and

at least two slots in said at least one mounting plate, said at least two slots being oriented in a substantially horizontal manner, said at least two slots and said at least two bolts providing said slidable connection.

6. The swimming pool of claim 1, further comprising a shaft upon which said reel is mounted, said at least one mounting plate including a hole therethrough, said shaft passing through said hole.

7. The swimming pool of claim 1, wherein said at least one equipment mounting assembly further comprises a bearing, said at least one mounting plate including a cavity, said bearing being mounted in said cavity.

8. The swimming pool of claim 7, further comprising a shaft having two ends, said reel being mounted on said shaft, one end of said shaft being disposed through said bearing.

9. The swimming pool of claim 1, wherein said at least one equipment mounting assembly further comprises a bottom plate, said at least one mounting plate having a bottom edge, said bottom edge being connected to said bottom plate in a substantially perpendicular manner, said bottom plate configured to engage at least one said locating feature.

10. A pool cover box assembly for housing a swimming pool cover, comprising:  
a plurality of walls defining the sides of said pool cover box assembly;  
a bottom, at least one of said bottom and said plurality of walls having locating features; and

5 at least one equipment mounting assembly located in said pool cover box assembly by contacting said locating features, comprising at least one positioning feature configured to engage two of said plurality of walls.

11. The pool cover box assembly of claim 10, further comprising at least one mounting plate, said at least one positioning feature adjustably connected to said mounting plate.

12. The pool cover box assembly of claim 11, wherein said mounting plate is configured to engage at least one of said locating features.

13. The pool cover box assembly of claim 11, wherein at least one said positioning feature comprises:

at least two sliding members including a first sliding member and a second sliding member, each said sliding member slidably connected to said mounting plate; and

5 at least two connecting members including a first connecting member and a second connecting member, each connecting member having two ends, one end of said first connecting member being pivotally connected to said first sliding member, an other end of said first connecting member being pivotally connected to an end of said second connecting member, an other end of said second connecting member pivotally connected to said second sliding member.

14. The pool cover box assembly of claim 13, wherein said plurality of walls include a front wall and a rear wall, said first sliding member configured to engage said front wall and said second sliding member configured to engage said rear wall.

15. The pool cover box assembly of claim 13, wherein said at least one positioning feature further comprises:

at least two bolts; and

5 at least two slots in said at least one mounting plate, said at least two slots being oriented in a substantially horizontal manner, said at least two slots and said at least two bolts providing said slidable connection.

16. The pool cover box assembly of claim 11, further comprising a shaft, said at least one mounting plate including a hole therethrough, said shaft passing through said hole.

17. The pool cover box assembly of claim 11, wherein said at least one equipment mounting assembly further comprises a bearing, said at least one mounting plate including a cavity, said bearing mounted in said cavity.

18. The pool cover box assembly of claim 17, further comprising a shaft having two ends, one end of said shaft being disposed in said bearing.

19. The pool cover box assembly of claim 11, wherein said at least one equipment mounting assembly further comprises a bottom plate, said at least one mounting plate having a bottom edge, said bottom edge being connected to said bottom plate in a substantially perpendicular manner, said bottom plate configured to engage at least one said locating feature.

20. An equipment mounting assembly for mounting equipment in a pool cover box, comprising:

at least one positioning feature configured to engage at least two walls of the pool cover box; and

5 at least one mounting plate, said at least one positioning feature adjustably connected to said mounting plate.

21. The equipment mounting assembly of claim 20, wherein said mounting plate is configured to engage a locating feature.

22. The equipment mounting assembly of claim 20, wherein at least one said positioning feature comprises:

at least two sliding members including a first sliding member and a second sliding

member, each said sliding member slidably connected to said mounting plate; and

5 at least two connecting members including a first connecting member and a second connecting member, each connecting member having two ends, one end of said first connecting member being pivotally connected to said first sliding member, an other end of said first connecting member being pivotally connected to an end of said second connecting member, an other end of said second connecting member pivotally connected to said second sliding member.

23. The equipment mounting assembly of claim 22, wherein said at least one positioning feature further comprises:

at least two bolts; and

at least two slots in said at least one mounting plate, said at least two slots being oriented

5 in a substantially horizontal manner, said at least two slots and said at least two bolts providing said slidable connection.

24. The equipment mounting assembly of claim 20, further comprising a shaft, said at least one mounting plate including a hole therethrough, said shaft passing through said hole.

25. The equipment mounting assembly of claim 20, wherein said at least one equipment mounting assembly further comprises a bearing, said at least one mounting plate including a cavity, said bearing being mounted in said cavity.

26. The equipment mounting assembly of claim 25, further comprising a shaft having two ends, one end of said shaft being disposed in said bearing.

27. The equipment mounting assembly of claim 20, further comprising a bottom plate, said at least one mounting plate having a bottom edge, said bottom edge being connected to said bottom plate in a substantially perpendicular manner.

28. A method of installing an equipment mounting assembly into a pool cover box, comprising the steps of:

providing a pool cover box having a front wall, a rear wall and a bottom;

providing two equipment mounting assemblies, each said equipment mounting assembly comprising:

at least one mounting plate; and

at least one positioning feature adjustably connected to at least one said mounting plate;

providing a pool cover on a shaft;

10 assembling one of said two equipment mounting assemblies on one end of said shaft;

assembling an other of said two equipment mounting assemblies on an other end of said shaft; and

engaging each of said two equipment mounting assemblies with at least two of said front wall, said rear wall and said bottom.

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